



EM Program Planning and Budget

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EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

EM Mission

“Complete the safe cleanup of the environmental legacy brought about from five decades of nuclear weapons development, production, and Government-sponsored nuclear energy research.”



- *Largest environmental cleanup effort in the world, originally involving two million acres at 108 sites in 35 states*
- *Safely performing work*
 - *In challenging environments*
 - *Involving some of the most dangerous materials known to man*
 - *Solving highly complex technical problems with first-of-a-kind technologies*
- *Operating in the world's most complex regulatory environment*
- *Supporting other continuing DOE missions and stakeholder partnerships*



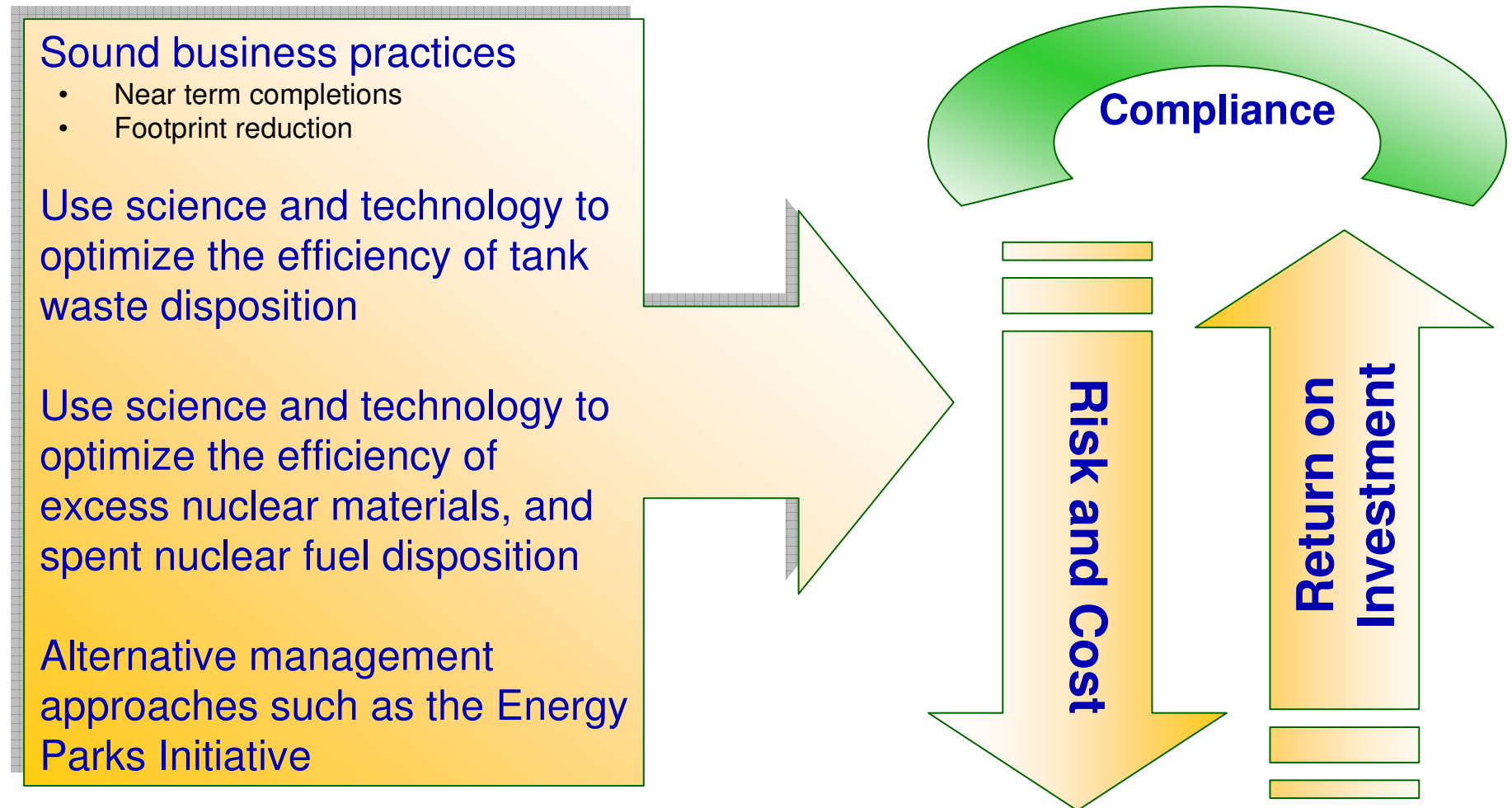
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Program Priorities

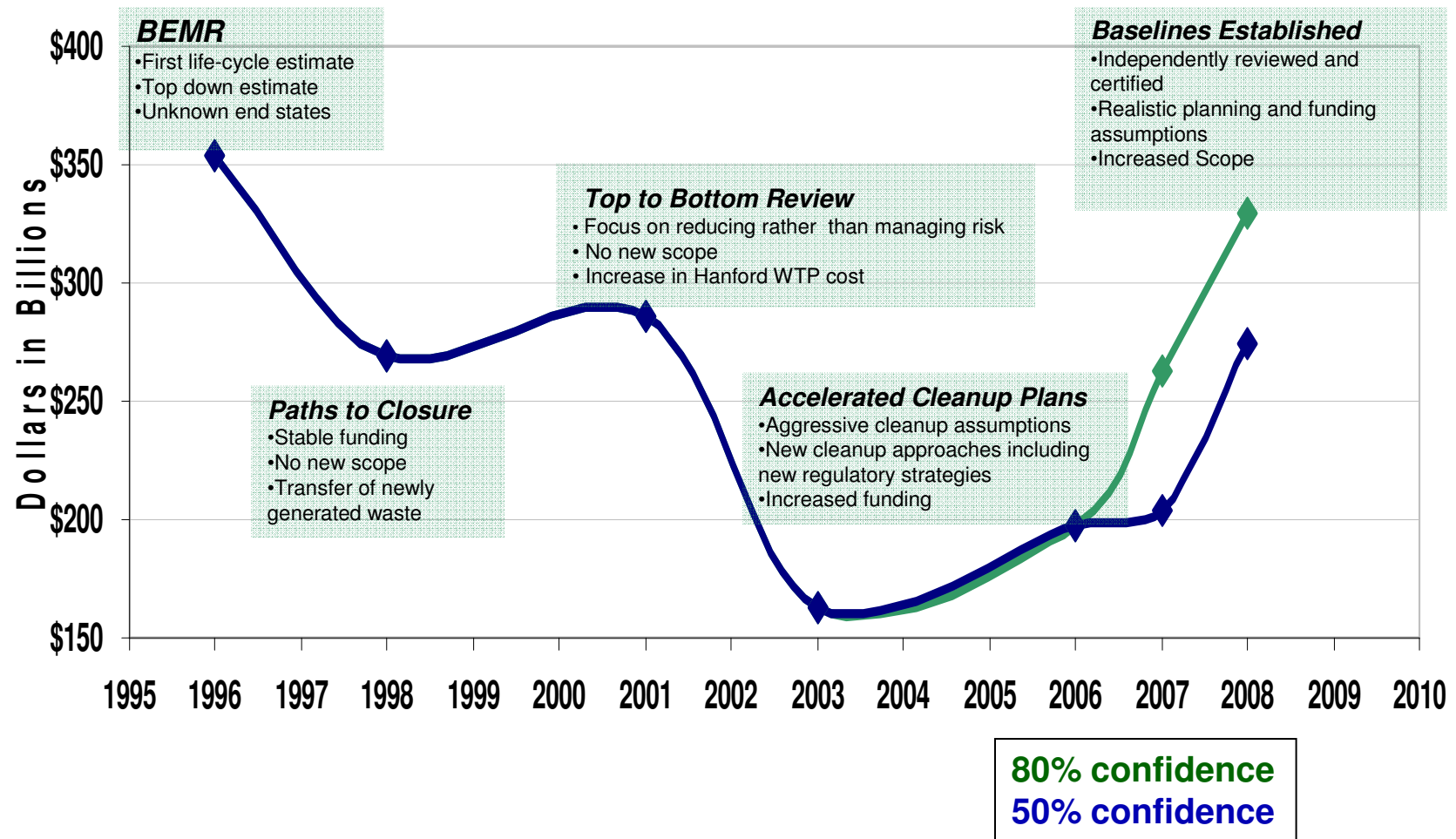
- *Essential activities to maintain a safe and secure posture in the EM complex*
- *Radioactive tank waste stabilization, treatment, and disposal*
- *Spent nuclear fuel storage, receipt, and disposition*
- *Special nuclear material consolidation, processing, and disposition*
- *High priority groundwater remediation*
- *Transuranic and mixed/low-level waste disposition*
- *Soil and groundwater remediation*
- *Excess facilities deactivation and decommissioning (D&D)*

Cleanup Approach



EM Life-cycle Cost

Evolution of EM Life-cycle Cost



EM Life-cycle Cost

Evolution of EM Life-cycle Cost

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Key Scope Assumptions	BEMR <ul style="list-style-type: none">•First life-cycle estimate•Top down estimate•Unknown end states		Paths to Closure <ul style="list-style-type: none">•Stable funding•No new scope•Transfer of newly generated waste		Top to Bottom Review and Accelerated Cleanup Plans <ul style="list-style-type: none">•Aggressive cleanup assumptions•New cleanup approaches including new regulatory strategies•Increased funding•Portsmouth & Paducah GDP D&D removed from scope•Office of Future Liabilities responsible for any new scope•Removal of Pu from Hanford•Low activity tank waste treated/disposed in situ•Transfer of spent fuel program to RW•Transfer of H canyon to NNSA in FY2008• No treatment of Idaho calcine waste		Certified Baselines <ul style="list-style-type: none">• Re-baseline to more realistic funding assumptions• Increased Scope:<ul style="list-style-type: none">• Hanford WTP due to changing requirements• More robust design criteria for SRS Salt Waste Processing Facility• Los Alamos Consent Order• Portsmouth & Paducah GDP D&D• Pension & benefit liabilities• SNF program remains in EM• New scope:<ul style="list-style-type: none">• IFDP at Oak Ridge• Treatment and disposal of U233 in Building 3019 at Oak Ridge• Consolidation of Pu at SRS• Disposition of 13 MT of Surplus PU utilizing H-canyon• No in tank disposal of low activity waste activity tank• Treatment of Idaho calcine waste						

EM Life-cycle Cost

Life-Cycle Cost Estimate for Current EM Scope

\$274 - \$330B
2050 - 2062

**Remaining EM
Work Scope
\$205 - \$260B**

**1997 - 2007
\$69B**

**FY 2008
Environmental Liability**

New EM Scope

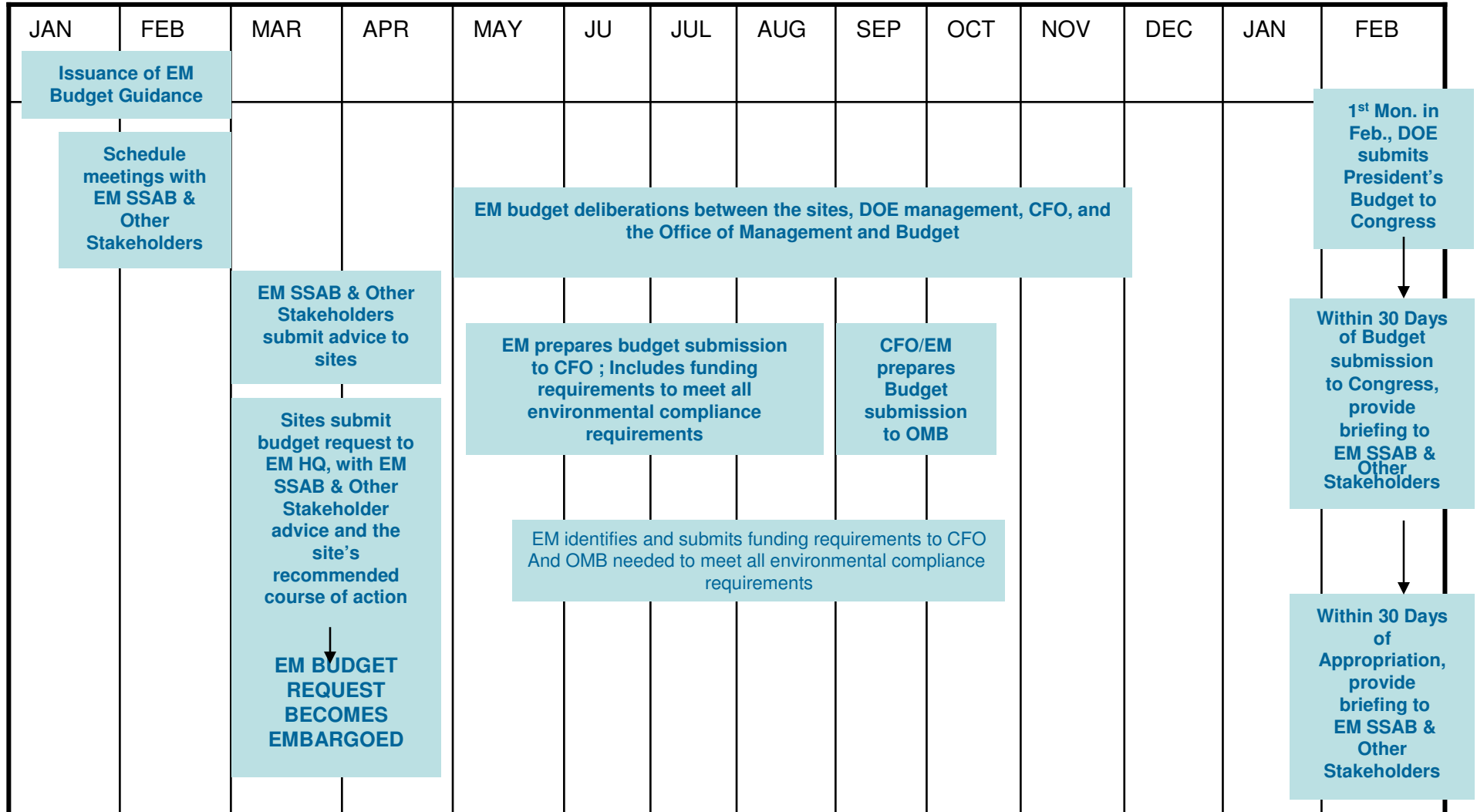
- ❖ **NNSA, SC and NE identified cleanup work for EM consideration**
- ❖ **306 surplus facilities**
- ❖ **34 types of materials**
- ❖ **\$3.7B-9.2B Cost estimate**



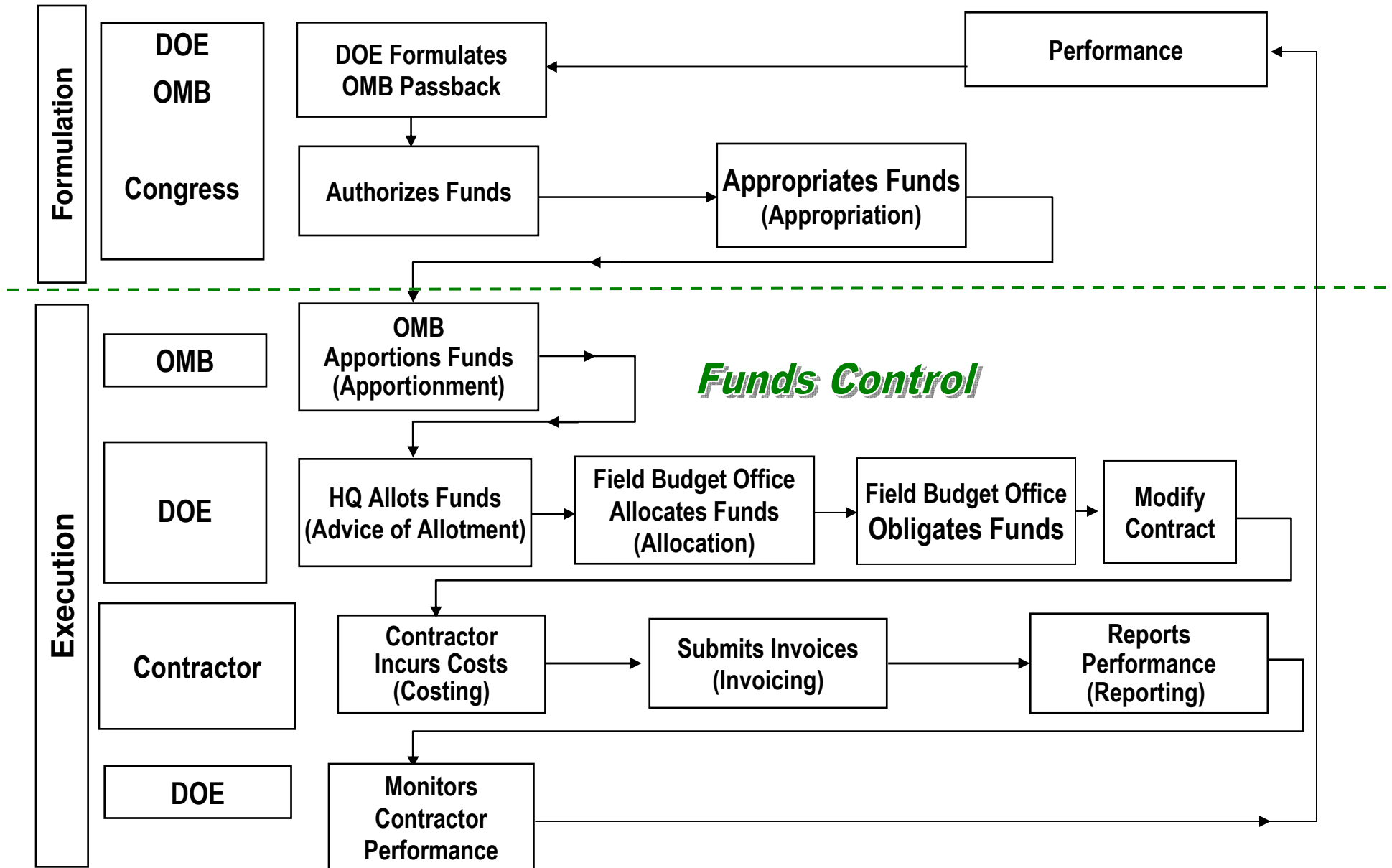
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Overview of Budget Process

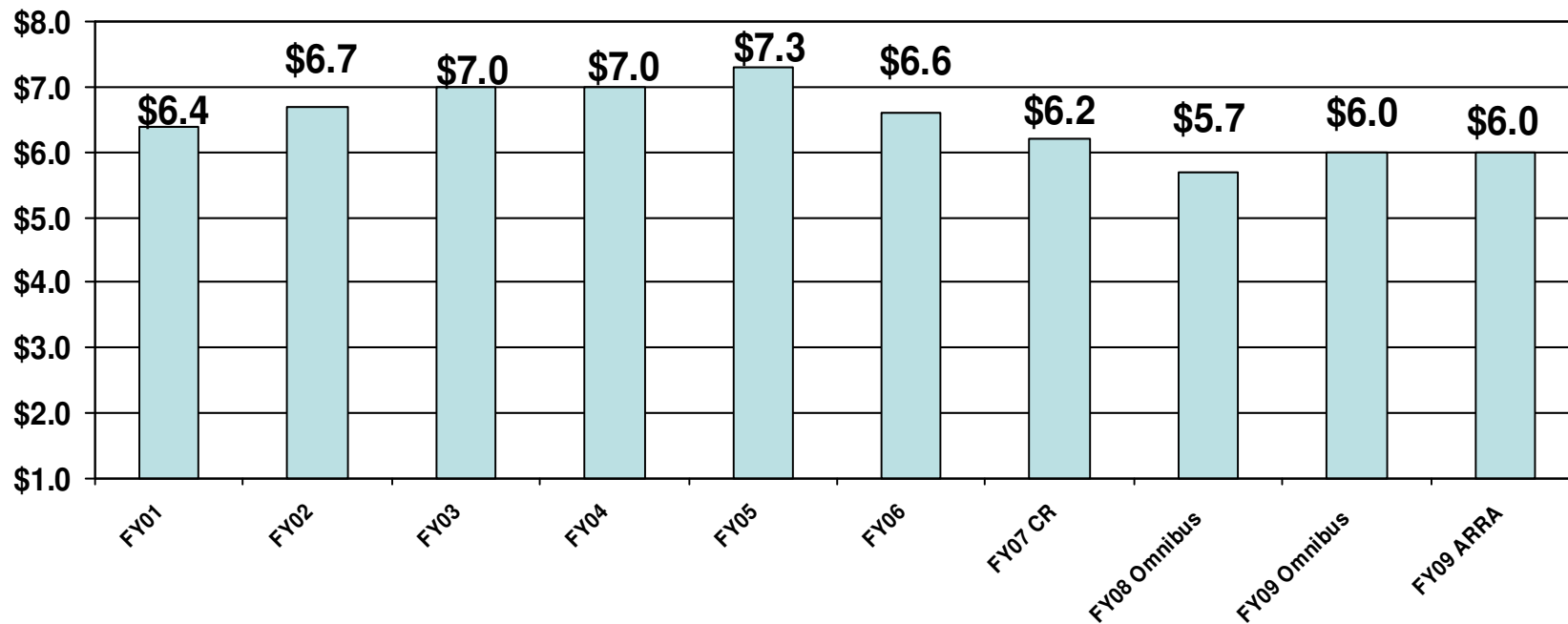


Overview of Budget Process

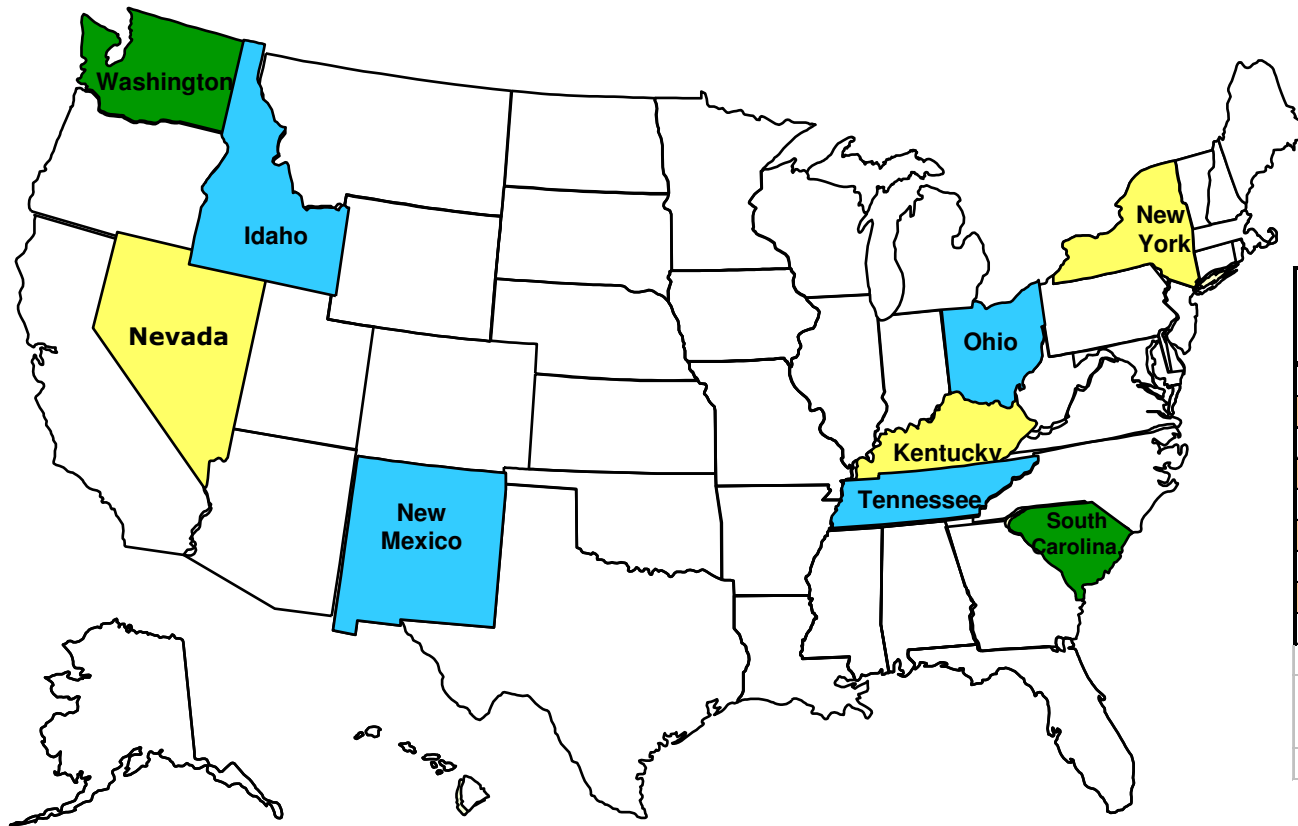


EM Funding History

\$ in billions



EM Program FY 2009 Budget



Legend:

Over \$1 billion \$300 million to \$1 billion \$50 million to \$300 million

**EM Budget
\$6.0 Billion**

State ^a	FY 2009 Omnibus (\$ in Millions)
Washington	2,138
South Carolina	1,411
Tennessee	514
Idaho	499
New Mexico	478
Ohio	324
Kentucky	180
New York	93
Nevada	76

^aTable only includes states with \$50M or greater in EM funding.

Site Specific Distribution

	FY 2008 Approp	FY 2009 Omnibus	FY 2009 Stimulus
Argonne National Laboratory	\$433	\$29,479	
Brookhaven	\$15,438	\$8,433	
Energy Technology Engineering Center	\$12,882	\$15,000	
Fernald	\$0	\$2,100	
Hanford	\$1,001,749	\$1,057,496	
Idaho	\$522,838	\$489,239	
Los Alamos National Laboratory	\$175,158	\$224,639	
Miamisburg	\$30,032	\$30,574	
Moab	\$23,734	\$45,699	
Nevada	\$85,368	\$75,674	
Oak Ridge	\$493,038	\$498,738	
Office of River Protection	\$976,540	\$1,009,943	
Paducah	\$148,211	\$169,922	
Portsmouth	\$224,260	\$240,690	
Savannah River	\$1,286,754	\$1,361,479	
SPRU	\$27,334	\$18,000	
Stanford Linear Accelerator Center	\$7,846	\$4,883	
Waste Isolation Pilot Plant	\$239,467	\$236,785	
West Valley Demonstration Project	\$66,485	\$66,900	
Other Sites	\$36,365	\$4,630	
Completed Sites Administration and Support	\$12,915	\$14,309	
Program Direction	\$306,941	\$309,807	
Program Support	\$32,844	\$33,930	
Uranium Thorium Reimbursement	\$19,818	\$10,000	\$70,000
Technology Development & Deployment	\$20,600	\$32,320	
Congessionally Directed Activities	\$17,195	\$22,665	
	\$5,756,869	\$5,991,572	\$6,000,000



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Recovery Act Priorities

- *Maximum return on money invested*
- *“Shovel Ready” Projects*
 - *Fully defined cost, scope and schedule*
 - *Established regulatory framework*
 - *Proven technology*
 - *Proven performance*
- *Contractual mechanisms in place*
 - *Ability to deploy resources quickly and accountability for results*
- *Ability to place “Boots on the Ground”*
 - *Create and / or preserve jobs*

Recovery Act Scope

- *Scope that can most readily be accelerated to take advantage of Recovery Act funds*
 - *Soil and water remediation*
 - *Radioactive waste disposition*
 - *Facility decommissioning*
- *Site closure and EM completions*
- *Reduce the EM footprint*
 - *Across the complex*
 - *Within a site*



Recovery Act Status

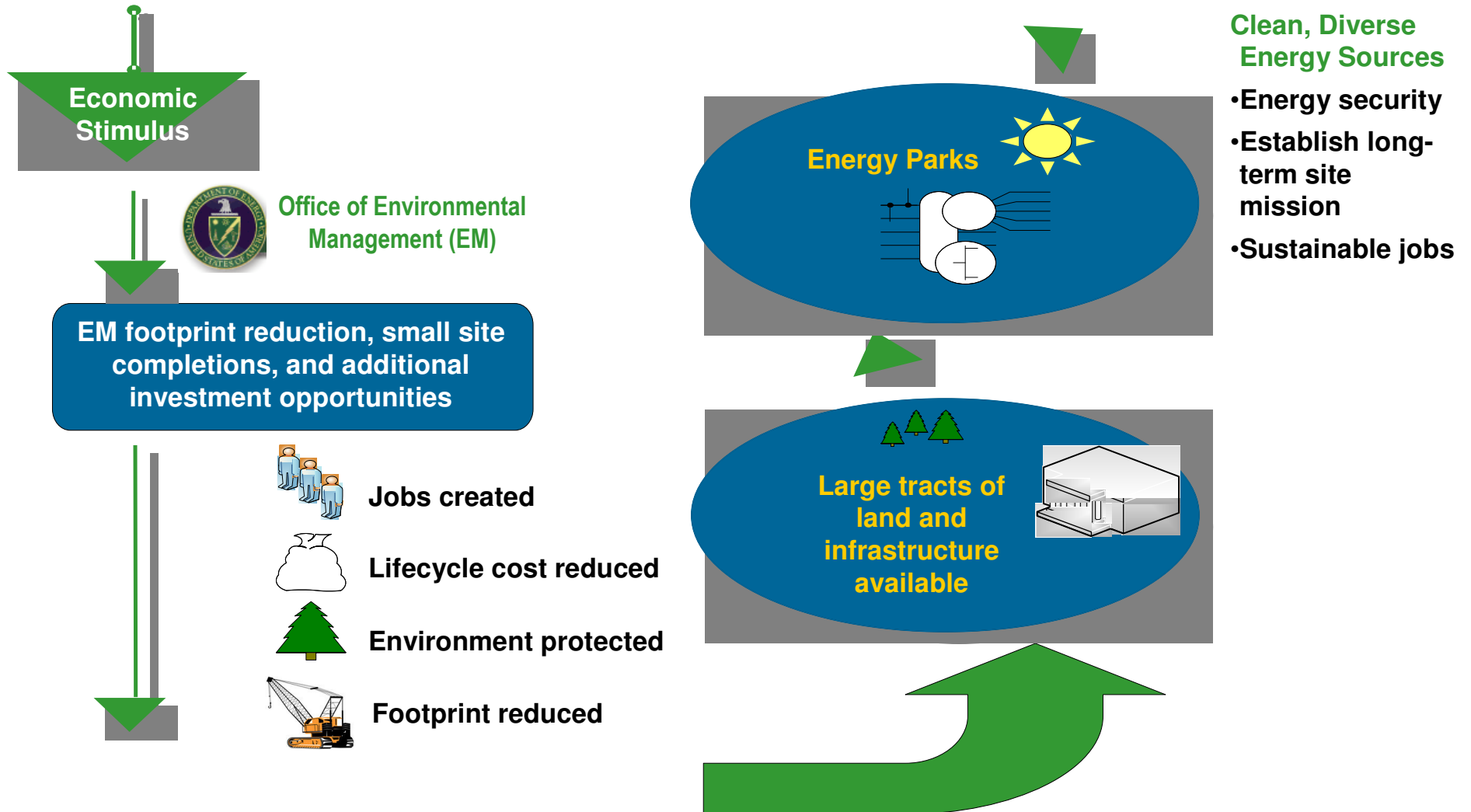
- *Aggressive implementation—ARRA funding within two weeks*
- *Opportunities identified at 17 sites in 12 states meeting ARRA principles (totaling \$6B through FY 2011)*
 - *ARRA proposals developed by sites with site priorities in mind*
 - *ARRA proposals accelerate work activities that have compliance milestones associated with them*
 - *Flexibility in work scope, but first and foremost, ARRA funds are about job creation*
- *Applying Project Management Principles*
 - *Graded approach*



Recovery Act

- *EM has been given the opportunity to make additional investments in lower risk activities and complete building the capability for dispositioning tank waste, nuclear materials, and spent nuclear fuel*
- *With the additional funding EM will be expected to achieve results*
 - *Create and preserve thousands of jobs*
 - *Provide significant environmental cleanup*
 - *Make large tracts of land available for re-utilization*

Footprint Reduction



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